

Capturing Performance Across Domains

xAPI and Encoding

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Problem Solutions

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Our Effort

Problem: Learning is tracked, but performance context is often missing or **not linked**

GOAL: create practices and tools that could encode human performance in context across domains

Starting Point: Simulations → Corporate Learning

Measuring Performance

- Performance context around learning is important
- Existing work in measuring human performance serves as guide for capturing simulations
- Connecting learning and performance has positive outcomes

Interoperable Performance Assessment (IPA)

IPA (not just beer), it is:

“a method of uniformly defining and describing experience and context to assess learning and performance over time; to adapt training across a variety of environments, systems, and modalities, whereby performance is observed, assessed, evaluated, or asserted by systems or observers.”

Source: Poeppelman, T., Ayers, J., Hruska, Long, R., Amburn, C., Bink, M. (2013) Interoperable Performance Assessment using the Experience API. The Interservice/Industry Training, Simulation & Education Conference (I/ITSEC). Volume: 2013 (Conference Theme: Concepts and Technologies: Empowering an Agile Force)

Human Performance Markup Language (HPML)

- XML Schema
- Used to develop human performance measures via raw data and make assessments
- Constructs represents missions, tasks, conditions, etc.

Source: Stacy, W., Ayers, J., Freeman, J., & Haimson, C. (2006). Representing Human Performance with Human Performance Measurement Language. Washington, DC. Aptima, Inc.



Pipeline

Encoding/data collection library

Reduces complexity to support HPML/xAPI

Built on HPML constructs

Encodes Constructs in xAPI

Constructs

Mission

Phase

Task

Competency

METL

Training Objective

Standards

Knowledge and Skills

Experience

Position/Role

Platform

Training Environment

Training Characteristic

Measure

Assessment

Constructs (not relevant to corporate)

~~Mission~~

~~Phase~~

Task

Competency

~~METL~~

Training Objective

Standards

Knowledge and Skills

Experience

Position/Role

Platform

Training Environment

Training Characteristic

Measure

Assessment

Status

- Several companies testing
- Getting feedback from corporate community
- Determined *not relevant* constructs
- Gathering input on *other* constructs that are relevant to corporate learning
- Interested to finding people to test tools as they are developed